

10034981/blessing

(FILE 'HOME' ENTERED AT 23:11:01 ON 02 MAY 2003)

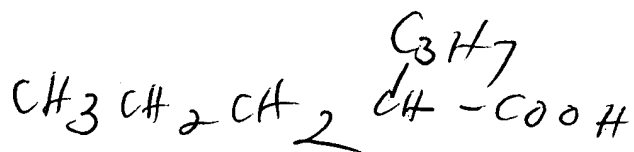
FILE 'REGISTRY' ENTERED AT 23:11:13 ON 02 MAY 2003

L1 0 S VALPRIOC ACID/CN  
L2 0 S VALPRIOC ACID  
L3 1 S VALPROIC ACID/CN  
L4 0 S VALPROATE/CN  
L5 19 S VALPROATE

FILE 'ADISCTI, ADISINSIGHT, ADISNEWS, BIOSIS, BIOTECHNO, CANCERLIT, CAPLUS, CEN, DGENE, DRUGB, DRUGLAUNCH, DRUGMONOG2, DRUGNL, DRUGU, EMBAL, EMBASE, ESBIODBASE, IFIPAT, IPA, JICST-EPLUS, KOSMET, LIFESCI, MEDICONF, MEDLINE, NAPRALERT, NLDB, NUTRACEUT, ...' ENTERED AT 23:13:05 ON 02 MAY 2003

L6 42833 S L3  
L7 34061 S L5  
L8 328 S ACUTE MIGRAINE HEADACHE  
L9 233 S L8 (P) TREAT?  
L10 5 S L9 AND L6  
L11 7 S L9 AND L7  
L12 3 DUP REM L11 (4 DUPLICATES REMOVED)  
L13 4 DUP REM L10 (1 DUPLICATE REMOVED)

*- applicants', date not good.*  
*- applicants', date not good.*



*Valproic acid*

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L13 ANSWER 1 OF 4 USPATFULL

ACCESSION NUMBER: 2002:280683 USPATFULL  
TITLE: Intravenous valproate for acute treatment of migraine headache  
INVENTOR(S): Edwards, Keith R., Williamstown, MA, UNITED STATES  
PATENT ASSIGNEE(S): LAHIVE & COCKFIELD, LLP. (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002156131	A1	20021024
APPLICATION INFO.:	US 2001-34981	A1	20011227 (10)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2000-564521, filed on 4 May 2000, ABANDONED		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-132416P	19990504 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	LAHIVE & COCKFIELD, 28 STATE STREET, BOSTON, MA, 02109	
NUMBER OF CLAIMS:	14	
EXEMPLARY CLAIM:	1	
LINE COUNT:	494	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention features a novel therapy for effecting acute **treatment** of migraine headache. The therapy involves intravenous administration of valproate and is equal to and in some respects superior to previously-known therapies for abortive **treatment** of prolonged moderate to severe **acute migraine headache**.

L13 ANSWER 2 OF 4 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.DUPLICATE 1  
 ACCESSION NUMBER: 2002002568 EMBASE  
 TITLE: Comparison of intravenous valproate versus intramuscular dihydroergotamine and metoclopramide for acute treatment of migraine headache.  
 AUTHOR: Edwards K.R.; Norton J.; Behnke M.  
 CORPORATE SOURCE: Dr. K.R. Edwards, Western New England Pain Center, Southwestern Vermont Medical Center, 140 Hospital Drive, Bennington, VT 05201, United States  
 SOURCE: Headache, (2001) 41/10 (976-980).  
 Refs: 18  
 ISSN: 0017-8748 CODEN: HEADAE  
 COUNTRY: United States  
 DOCUMENT TYPE: Journal; Article  
 FILE SEGMENT: 008 Neurology and Neurosurgery  
 037 Drug Literature Index  
 038 Adverse Reactions Titles  
 LANGUAGE: English  
 SUMMARY LANGUAGE: English

AB Objective - To determine the effectiveness and tolerability of intravenous valproate for the acute **treatment** of migraine headache with or without aura (International Headache Society diagnostic criteria 1.1 and 1.2) compared with intramuscular metoclopramide 10 mg followed 10 minutes later by intramuscular dihydroergotamine 1 mg. Background - Divalproex sodium is approved for prophylaxis of migraine headache. We studied the possible effectiveness of intravenous sodium valproate for the **treatment of acute migraine headache**. Valproate offers a **treatment** option for patients with migraine who recently have used a triptan or dihydroergotamine, theoretically avoiding the risk of drug interactions or cardiovascular complications. Design/Methods - In an open-label randomization, patients with an established diagnosis of migraine with or without aura were administered either intravenous valproate or intramuscular dihydroergotamine with metoclopramide to **treat** moderate-to-severe migraine headache of 24 to 96 hours' duration. Forty patients alternately received either 500 mg intravenous valproate or 10 mg metoclopramide intramuscularly followed by 1 mg dihydroergotamine. Patients rated severity of headache and the presence or absence of nausea, photophobia, or phonophobia at baseline, and at 1, 2, 4, and 24 hours. Results - With intravenous valproate, 50% of patients reported headache improvement from moderate or severe to none or mild at 1 hour following **treatment**, 60% reported such improvement at 2 hours, 60% at 4 hours, and 60% at 24 hours. Corresponding improvement rates for dihydroergotamine were 45% at 1 hour, 50% at 2 hours, 60% at 4 hours, and 90% at 24 hours. Intravenous valproate and intramuscular dihydroergotamine provided similar relief from associated migrainous symptoms (nausea, photophobia, and phonophobia) during the first 4 hours following **treatment**. While none of the patients who received intravenous valproate experienced drug-related side effects during **treatment**, 15% of patients who took dihydroergotamine experienced one or more episodes of nausea and diarrhea during the first 4 hours of **treatment**. Conclusions - Intravenous valproate is similar in effectiveness to dihydroergotamine/metoclopramide as abortive therapy for prolonged moderate-to-severe **acute migraine headache**. Although the results were not statistically significant ( $P=.3635$ ), intravenous valproate appears to offer a safe, effective, and well-tolerated **treatment** for patients with acute migraine. Relative to dihydroergotamine/metoclopramide, however, headache relief was not as likely to be sustained at 24 hours as with intravenous valproate.

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L13 ANSWER 2 OF 4 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.DUPLICATE 1  
ACCESSION NUMBER: 2002002568 EMBASE  
TITLE: Comparison of intravenous valproate versus intramuscular  
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migraine headache.  
AUTHOR: Edwards K.R.; Norton J.; Behnke M.  
CORPORATE SOURCE: Dr. K.R. Edwards, Western New England Pain Center,  
Southwestern Vermont Medical Center, 140 Hospital Drive,  
Bennington, VT 05201, United States  
SOURCE: Headache, (2001) 41/10 (976-980).  
Refs: 18  
ISSN: 0017-8748 CODEN: HEADAE  
COUNTRY: United States  
DOCUMENT TYPE: Journal; Article  
FILE SEGMENT: 008 Neurology and Neurosurgery  
037 Drug Literature Index  
038 Adverse Reactions Titles  
LANGUAGE: English  
SUMMARY LANGUAGE: English

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L13 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2003 ACS  
ACCESSION NUMBER: 2000:790298 CAPLUS

10034981/blessing

L13 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:790298 CAPLUS

DOCUMENT NUMBER: 133:329630

TITLE: Intravenous valproate for acute treatment of migraine headache

INVENTOR(S): Edwards, Keith R.

PATENT ASSIGNEE(S): USA

SOURCE: PCT Int. Appl., 17 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000066109	A2	20001109	WO 2000-US12317	20000504
WO 2000066109	A3	20010215		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
EP 1181012	A2	20020227	EP 2000-928865	20000504
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
US 2002156131	A1	20021024	US 2001-34981	20011227
PRIORITY APPLN. INFO.:			US 1999-132416P	P 19990504
			US 2000-564521	B1 20000504
			WO 2000-US12317	W 20000504

AB The present invention features a novel therapy for effecting acute **treatment** of migraine headache. The therapy involves i.v. administration of valproate and is equal to and in some respects superior to previously-known therapies for abortive **treatment** of prolonged moderate to severe **acute migraine headache**.

L13 ANSWER 4 OF 4 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.

ACCESSION NUMBER: 1999:410347 BIOSIS

DOCUMENT NUMBER: PREV199900410347

TITLE: Intravenous valproate for abortive **treatment** of **acute migraine headache**. Is there an anti-convulsant mechanism.

AUTHOR(S): Edwards, K. (1); Behnke, M. (1); Santarcangelo, V. (1)

CORPORATE SOURCE: (1) Neurological Research Center, Bennington, VT USA

SOURCE: Epilepsia, (1999) Vol. 40, No. SUPPL. 2, pp. 36.  
Meeting Info.: 23rd International Epilepsy Congress Prague, Czech Republic September 12-17, 1999  
ISSN: 0013-9580.

DOCUMENT TYPE: Conference

LANGUAGE: English

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DOCUMENT NUMBER: 133:329630  
TITLE: Intravenous valproate for acute treatment of migraine headache  
INVENTOR(S): Edwards, Keith R.  
PATENT ASSIGNEE(S): USA  
SOURCE: PCT Int. Appl., 17 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000066109	A2	20001109	WO 2000-US12317	20000504
WO 2000066109	A3	20010215		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1181012	A2	20020227	EP 2000-928865	20000504
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 2002156131	A1	20021024	US 2001-34981	20011227
PRIORITY APPLN. INFO.:				
			US 1999-132416P	P 19990504
			US 2000-564521	B1 20000504
			WO 2000-US12317	W 20000504

AB The present invention features a novel therapy for effecting acute **treatment** of migraine headache. The therapy involves i.v. administration of valproate and is equal to and in some respects superior to previously-known therapies for abortive **treatment** of prolonged moderate to severe **acute migraine headache**.

L12 ANSWER 1 OF 3 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.DUPLICATE 1  
 AN 2002002568 EMBASE  
 TI Comparison of intravenous valproate versus intramuscular dihydroergotamine and metoclopramide for acute treatment of migraine headache.  
 AU Edwards K.R.; Norton J.; Behnke M.  
 CS Dr. K.R. Edwards, Western New England Pain Center, Southwestern Vermont Medical Center, 140 Hospital Drive, Bennington, VT 05201, United States  
 SO Headache, (2001) 41/10 (976-980).  
 Refs: 18  
 ISSN: 0017-8748 CODEN: HEADAE  
 CY United States  
 DT Journal; Article  
 FS 008 Neurology and Neurosurgery  
 037 Drug Literature Index  
 038 Adverse Reactions Titles  
 LA English  
 SL English  
 AB Objective - To determine the effectiveness and tolerability of intravenous valproate for the acute **treatment** of migraine headache with or without aura (International Headache Society diagnostic criteria 1.1 and 1.2) compared with intramuscular metoclopramide 10 mg followed 10 minutes later by intramuscular dihydroergotamine 1 mg. Background - Divalproex sodium is approved for prophylaxis of migraine headache. We studied the possible effectiveness of intravenous sodium valproate for the **treatment of acute migraine headache**.  
 . Valproate offers a **treatment** option for patients with migraine who recently have used a triptan or dihydroergotamine, theoretically avoiding the risk of drug interactions or cardiovascular complications. Design/Methods - In an open-label randomization, patients with an established diagnosis of migraine with or without aura were administered either intravenous valproate or intramuscular dihydroergotamine with metoclopramide to **treat** moderate-to-severe migraine headache of 24 to 96 hours' duration. Forty patients alternately received either 500 mg intravenous valproate or 10 mg metoclopramide intramuscularly followed by 1 mg dihydroergotamine. Patients rated severity of headache and the presence or absence of nausea, photophobia, or phonophobia at baseline, and at 1, 2, 4, and 24 hours. Results - With intravenous valproate, 50% of patients reported headache improvement from moderate or severe to none or mild at 1 hour following **treatment**, 60% reported such improvement at 2 hours, 60% at 4 hours, and 60% at 24 hours. Corresponding improvement rates for dihydroergotamine were 45% at 1 hour, 50% at 2 hours, 60% at 4 hours, and 90% at 24 hours. Intravenous valproate and intramuscular dihydroergotamine provided similar relief from associated migrainous symptoms (nausea, photophobia, and phonophobia) during the first 4 hours following **treatment**. While none of the patients who received intravenous valproate experienced drug-related side effects during **treatment**, 15% of patients who took dihydroergotamine experienced one or more episodes of nausea and diarrhea during the first 4 hours of **treatment**. Conclusions - Intravenous valproate is similar in effectiveness to dihydroergotamine/metoclopramide as abortive therapy for prolonged moderate-to-severe **acute migraine headache**. Although the results were not statistically significant ( $P=.3635$ ), intravenous valproate appears to offer a safe, effective, and well-tolerated **treatment** for patients with acute migraine. Relative to dihydroergotamine/metoclopramide, however, headache relief was not as likely to be sustained at 24 hours as with intravenous valproate.  
 CT Medical Descriptors:  
 \*migraine: DT, drug therapy  
 \*headache: DT, drug therapy  
 drug efficacy  
 drug tolerability

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disease severity  
treatment outcome  
nausea: SI, side effect  
photophobia  
drug induced disease: SI, side effect  
diarrhea: SI, side effect  
drug safety  
human  
male  
female  
clinical article  
clinical trial  
randomized controlled trial  
controlled study  
adolescent  
aged  
adult  
article  
priority journal  
Drug Descriptors:  
\*valproic acid: AE, adverse drug reaction  
\*valproic acid: CT, clinical trial  
\*valproic acid: CM, drug comparison  
\*valproic acid: DT, drug therapy  
\*valproic acid: IV, intravenous drug administration  
\*dihydroergotamine: AE, adverse drug reaction  
\*dihydroergotamine: CT, clinical trial  
\*dihydroergotamine: CM, drug comparison  
\*dihydroergotamine: DT, drug therapy  
\*dihydroergotamine: IM, intramuscular drug administration  
\*metoclopramide: AE, adverse drug reaction  
\*metoclopramide: CT, clinical trial  
\*metoclopramide: CM, drug comparison  
\*metoclopramide: DT, drug therapy  
\*metoclopramide: IM, intramuscular drug administration

RN (valproic acid) 1069-66-5, 99-66-1; (dihydroergotamine)  
511-12-6; (metoclopramide) 12707-59-4, 2576-84-3, 364-62-5, 7232-21-5



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L12 ANSWER 3 OF 3 SCISEARCH COPYRIGHT 2003 THOMSON ISI  
AN 1999:698900 SCISEARCH  
GA The Genuine Article (R) Number: 225BU  
TI Intravenous **valproate** for abortive **treatment** of  
**acute migraine headache**. Is there an  
anti-convulsant mechanism?  
AU Edwards K (Reprint); Behnke M; Santarcangelo V  
CS NEUROL RES CTR, BENNINGTON, VT  
CYA USA  
SO EPILEPSIA, (10 SEP 1999) Vol. 40, Supp. [2], pp. 36-36.  
Publisher: LIPPINCOTT WILLIAMS & WILKINS, 227 EAST WASHINGTON SQ,  
PHILADELPHIA, PA 19106.  
ISSN: 0013-9580.  
DT Conference; Journal  
FS LIFE  
LA English  
REC Reference Count: 0  
CC CLINICAL NEUROLOGY

10034981/blessing

L12 ANSWER 2 OF 3 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE 2  
AN 1999:410347 BIOSIS  
DN PREV199900410347  
TI Intravenous valproate for abortive **treatment** of **acute migraine headache**. Is there an anti-convulsant mechanism.  
AU Edwards, K. (1); Behnke, M. (1); Santarcangelo, V. (1)  
CS (1) Neurological Research Center, Bennington, VT USA  
SO Epilepsia, (1999) Vol. 40, No. SUPPL. 2, pp. 36.  
Meeting Info.: 23rd International Epilepsy Congress Prague, Czech Republic  
September 12-17, 1999  
ISSN: 0013-9580.  
DT Conference  
LA English  
CC Pharmacology - General \*22002  
Biochemical Studies - General \*10060  
Pathology, General and Miscellaneous - Diagnostic \*12504  
Pathology, General and Miscellaneous - Therapy \*12512  
Sense Organs, Associated Structures and Functions - General; Methods \*20001  
Nervous System - General; Methods \*20501  
Cardiovascular System - General; Methods \*14501  
General Biology - Symposia, Transactions and Proceedings of Conferences, Congresses, Review Annuals \*00520  
BC Hominidae 86215  
IT Major Concepts  
Neurology (Human Medicine, Medical Sciences); Pharmacology  
IT Diseases  
**acute migraine headache**: abortive  
**treatment**, diagnosis, vascular disease, nervous system disease;  
phonophobia: ear disease; photophobia: eye disease  
IT Chemicals & Biochemicals  
dihydroergotamine: antimigraine - drug, intramuscular; metoclopramide:  
antimigraine - drug, intramuscular; sodium valproate: anticonvulsant  
mechanism, antimigraine - drug, intravenous  
IT Miscellaneous Descriptors  
Meeting Abstract; Meeting Poster  
ORGN Super Taxa  
Hominidae: Primates, Mammalia, Vertebrata, Chordata, Animalia  
ORGN Organism Name  
human (Hominidae): patient  
ORGN Organism Superterms  
Animals; Chordates; Humans; Mammals; Primates; Vertebrates  
RN 99-66-1 (VALPROATE)  
1069-66-5 (SODIUM VALPROATE)  
511-12-6 (DIHYDROERGOTAMINE)  
364-62-5 (METOCLOPRAMIDE)